

Ideation Phase

Define the Problem Statements

Date	31 January 2026
Team ID	LTVIP2026TMIDS87433
Project Name	Rain Prediction Pipeline Flask
Maximum Marks	2 Marks

Customer Problem Statement:

This section helps us understand the user's point of view and the real challenges they face related to rainfall prediction. By identifying their needs and difficulties, we aim to design a solution that is practical and easy to use.

A clear problem statement helps our team build a system that predicts rainfall accurately and supports users such as farmers, travelers, and event planners in making better decisions. It also allows us to empathize with users and understand how they experience weather uncertainty in daily life.

Customer Problem Statements

Understand the challenges your target users face with unpredictable rainfall.
Empathize with their problems to design better solutions.

Farmer		Event Planner	
	a farmer		an event planner
	I want to: know if I should water my crops tomorrow		Be sure if my outdoor event will be affected by rain
	But: weather forecasts are often inaccurate		It's hard to rely on current weather forecasts
	Because: rainfall prediction is unreliable		Weather conditions change quickly
	Which makes me feel: worried about crop loss or water waste		Which makes me feel: stressed and unsure about my event plan

Example:

I am	I'm trying to	But	I am	I'm trying to	Which makes me feel
	decide whether to irrigate crops tomorrow	I'm unsure if it will rain		plan an outdoor event	stressed and unsure
But	I'm unsure if it will rain		But	I don't know if rain will disrupt it	
Because	weather forecasts are not always reliable		Because	weather conditions can change suddenly	
Which makes me feel	worried about crop damage and water waste		Which makes me feel	stressed and unsure	

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A Farmer	predict whether it will rain so I can plan my activities	I don't have an easy-to-use and accurate prediction tool	weather apps are often generic and not data-driven for my local inputs	uncertain and stressed about making wrong decisions
PS-2	Beginner data analyst	understand rainfall trends and predictions	I struggle to connect machine learning results with a simple interface	most ML projects don't provide real-time web visualization	confused and disconnected from the model outputs